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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,777	07/28/2003	Takeshi Fujimoto	12852-017001	4507
26211 7590 02/12/2007 FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER PAK, SUNG H	
			ART UNIT	PAPER NUMBER
			2874	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/12/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/628,777	FUJIMOTO ET AL.	
	Examiner	Art Unit	
	Sung H. Pak	2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/27/06 has been entered.

Response to Arguments

Applicant's arguments with respect to pending claims have been considered but are moot in view of the new ground(s) of rejection. The new ground of rejection was necessitated by the claim amendment and the request for continued examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-8 are rejected under 35 U.S.C. 102(a) as being anticipated by Sato et al (US 2002/0126456 A1).

Sato reference discloses an optical communications module with all the claimed elements of the above-mentioned claims, including: a rectangular chassis* (Fig. 4 clearly shows a chassis having a rectangular cross section, the rectangular shape comprising elements '26g', '22a', '32', '30' as its sides); wherein at least two of four longest side faces of chassis ('22a' and '26g' in Fig. 4) are respectively defined by a dielectric wiring substrate having a metal part on an outer side thereof (for substrate '22', the metal part is '22b' as shown in Fig. 3 or Fig. 4; for substrate '26', the metal part is '26a', or '26b', etc. as shown in Fig. 2); said dielectric wiring substrates having an optical transmitter section, an optical receiver section, or an optical transceiver section provided thereon (both substrates have a section contacting the optical element assembly '24' as shown in Fig. 4);

wherein at least one dielectric wiring substrate having the metal part formed on one side thereof comprises a metal base substrate (see Fig. 3; paragraph 0061- the "metal base" is element '22c');

wherein said dielectric wiring substrates are thermally connected together through a metal part of said chassis (as shown in Fig. 2 and Fig. 4, "a metal part" labeled '22b' contacts both substrates. As such there is inherent thermal coupling between the two substrate through the metal part '22b', at least for parts of the two substrates in close proximity to element '22b');

wherein said dielectric wiring substrates are thermally separated from each other (Fig. 4- for portions of the two substrates that are not in close proximity to element '22b', those portions are thermally separated because there is an air gap between the two substrates as shown in Fig. 4);

* Merriam-Webster's Collegiate Dictionary, 10th edition defines "Chassis" as: "the frame and working parts (as of

wherein said chassis has one or more vents ('22g' Fig. 3);

wherein one or more dielectric wiring substrates comprise multilayer wiring substrates ('26' in Fig. 2 and Fig. 4- Fig. 4 clearly shows the "multilayer" property of the substrate '26'; see also paragraph 0060); and an exposed surface of the multilayer substrate has a metal plate adhered thereto ('28' Fig. 8 being the "metal plate"; the metal plate is adhered to the substrate via heat transfer element '60' as shown in Fig. 10);

wherein a heat sink is provided on the exposed surface of the dielectric wiring substrate ('60' Fig. 10 being the "heat sink");

wherein the metal part formed on one side of the dielectric wiring board is partially removed ('22g' Fig. 3), exposing other components of said optical transmitter section, optical receiver section, or optical transceiver section (paragraph 0063) through the removed portion to the outside of the optical communications module (paragraph 0063).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sung H. Pak whose telephone number is (571) 272-2353. The examiner can normally be reached on Monday- Friday, 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571)272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2874

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Sung H. Pak', with a long horizontal flourish extending to the right.

Sung H. Pak
Primary Patent Examiner
Art Unit 2874